

REMARKS

Pursuant to 37 C.F.R. § 1.111, reconsideration of the rejections of the Official Action of February 10, 2006 is respectfully requested by Applicant.

Summary

Claims 16-19 and 27-30 were rejected.

Claim 31 was added to more clearly describe the claimed embodiments. The Applicant respectfully asserts that this new claim includes features found in the specification and drawings as filed, and does not constitute new matter.

Claim Rejections

Claims 27, 16, 17, 19, 28, 29, and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Davidson (U.S. Pat. No. 4,103,519) in view of either Faidley (U.S. Pat. No. 2,986,649) or Umezawa (U.S. Pat. No. 4,740, 726). Applicants respectfully traverse the rejection.

Claim 27 recites a wet treatment nozzle comprising, *inter alia*, a pressure controller. The pressure controller maintains a difference between the pressure of the treatment liquid in contact with the object to be treated and an atmospheric pressure, so that the treatment liquid wet treats only the portion of the object to be treated. The pressure difference is used so that the treatment liquid in contact with the object does not flow to the outside of the exhaust passage after the wet treatment. In other words, the treatment liquid is exhausted from above the object being cleaned without contacting a portion other than the portion to which the treatment liquid is supplied.

The Examiner states that Davidson discloses the wet treatment nozzle as recited in Claim 27. However, Davidson fails to teach or disclose a pressure difference between the treatment liquid in contact with the object to be treated and an atmospheric pressure, so that the treatment liquid wet treats only the portion of the object to be treated. More specifically, Davidson teaches a central chamber (11) which holds the cleaning solution. The central chamber (11) is formed by a wall (15) surrounding the central chamber and by the material to be cleaned which forms the bottom of the chamber. The pressure difference disclosed in Davidson is between

the pressure on outside of the wall (15) and the pressure exerted by the solution at the bottom of the inside of the wall (15). (col. 4, line 28). Thus, the pressure difference in Davidson between the peripheral side of the wall and the central chamber side of the wall is different than the pressure difference between the liquid in contact with the object and the atmospheric pressure as recited in Claim 27.

The resultant effect of Davidson is also completely different than the resultant effect of the arrangement in Claim 27. In Davidson the pressure difference reduces air flow into the cleaning solution which reduces the formation of bubbles in the solution which absorb vibrational energy. In the arrangement of Claim 27 the pressure difference permits wet treating only a desired portion of the object. Moreover, Davidson teaches creating a central chamber with walls that keep the solution to a fixed portion of the object rather than using the pressure difference as recited in Claim 27.

Thus, Davidson fails to teach or disclose a difference between the pressure of the treatment liquid in contact with the object to be treated and an atmospheric pressure, so that the treatment liquid wet treats only a portion of the object to be treated to which the treatment liquid is supplied.

Faidley or Umezawa, cited by the Examiner as disclosing a weight provided on the housing of the ultrasonic cleaner, also fail to teach or suggest the above-discussed arrangement of Claim 27.

Therefore, reference combinations of Davidson, with Faidley or Umezawa may not properly be used to reject Claim 27 under 35 U.S.C. § 103(a).

Accordingly, Claim 27 is allowable, as well as dependent Claims 16, 17, 19, 28, 29, and 30.

The Examiner has rejected Claim 18 under 35 U.S.C. § 103(a) as being unpatentable over the applied prior art as applied to Claim 27, and further in view of Eppes (U.S. Pat. 4,764,021). Eppes fails to teach or suggest the arrangement of Claim 27 as discussed above.

Dependent Claim 18 depends on Claim 27 and is allowable for at least the same reasons.

New Claim

Dependent Claim 31 depends from independent Claim 27, so is allowable for the same reasons. Further limitations of dependent Claim 31 are allowable over the cited sections of the references. Claim 31 recites the ultrasonic cleaner guides the treatment liquid introduced from the introduction passage such that fresh treatment liquid is always supplied to the object to be treated. The cited art fails to disclose the arrangement of Claim 31. Davidson teaches a contrary arrangement. Davidson discloses a stainless steel housing 27 fixed to the central chamber 11, which does not affect the flow of the treatment liquid. Davidson teaches a gap between the wall 15 and the stainless steel housing 27 where the treatment liquid accumulates. This accumulation of the treatment liquid leads to the recontamination of the object. Faidley and Umezawa also fail to disclose the limitation of Claim 31. Accordingly, Claim 31 is allowable over the cited art.

Conclusion

Applicants respectfully submit that all of the pending claims are in condition for allowance and seek an early allowance thereof. If for any reason the Examiner is unable to allow the application in the next Office Action and believes that a telephone interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned.

Respectfully submitted,



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